In the Abstract:

ABSTRACT OF THE DISCLOSURE

ATM edge node switching equipment ~~utilized~~ utilizes an IP-VPN function, which can achieve a low cost VPN compared with an L2-VPN in which a user terminal is connected to the ATM edge node switching equipment by a mesh connection~~,~~. This connection is provided, by connecting the user terminal and the ATM edge node switching equipment with one leased line. The ATM edge node switching equipment ~~provides~~ has an IP data packet distribution ~~function~~unit, which distributes each of IP data packets to each of the plural user terminals, by utilizing ~~the~~ a IP-VPN unit~~function by~~ using a destination IP address of each of the plural user terminals. The IP-VPN unit has~~function provides~~ an inputted IP data packet analyzing section that obtains an input VC (virtual channel) number and also obtains a VPN-ID (virtual private network-identifier) for distinguishing each of the user terminals~~,~~and a QOS (quality of service) type set by QOS information ~~composed of a protocol type, a destination service port number, a source address service port number, and a code point,~~ from a header part of the IP data packet transferred from one of the user terminals. ~~And further the~~ The IP-VPN device also has~~function provides~~ a routing information retrieving section that retrieves a routing of a VC for a destination address by using the destination IP address, the VPN-ID, and the QOS type, and sets the routing of the VC for the destination address. ~~With this, the number of lines connecting to the user terminal and the ATM edge node switching equipment is reduced compared with the L2-VPN being a general leased line connection, and the connection cost can be reduced. And the same QOS at the L2-VPN can be secured at the ATM edge node switching equipment utilized the IP-VPN function.~~